OLYMPUS

Olympus Lung Cancer Solutions

For Diagnosis and Staging

Supporting You Every Step of the Way

With a legacy of expertise in lung cancer diagnosis and staging, we stand by your side, ready to tackle any current and future challenges together.

- **Long-term Expertise:**
  Decades of experience in lung cancer diagnosis and staging.
- **Innovative Solutions:**
  A pioneer and innovator in Endobronchial Ultrasound (EBUS) technology.
- **Comprehensive Support:**
  Dedicated field service and personalized clinical support teams.
- **Future-Ready Partnership:**
  Commited to evolving and growing with you.

Global Challenges

Lung Cancer Statistics

Detect early, save lives!

An estimated

1-2 million people die each year from lung cancer,

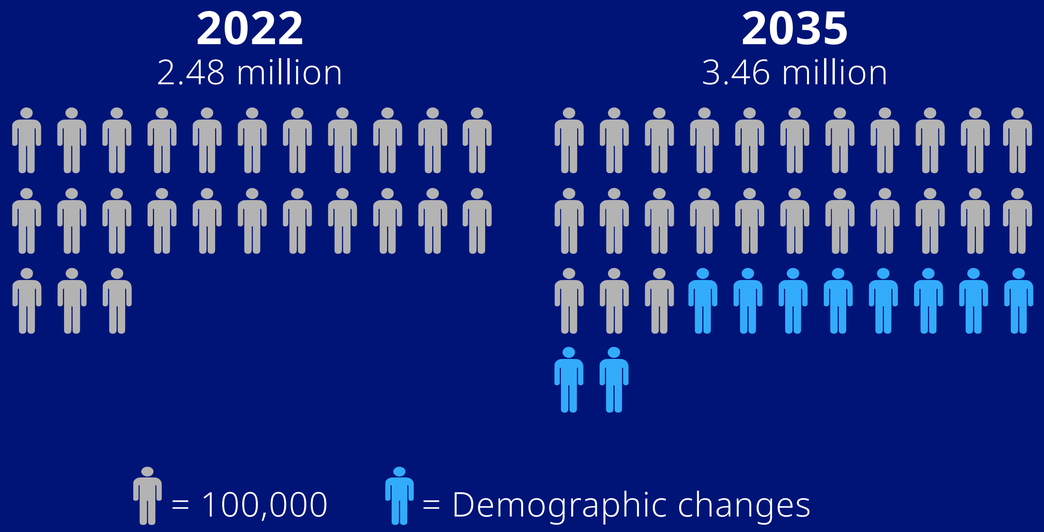
a trend that could be significantly reduced with preemptive lung cancer screening.[1,2]

The estimated number of new lung cancer cases will reach

3.46M people globally by 2035.[3]

Estimated Number of New Worldwide Cases

From 2022 to 2035, Both sexes, age 0-85+[3] (Trachea, bronchus and lung)



Global Challenges

Screening Program Adoption

Low Dose Computed Tomography (LDCT) based lung cancer screening reduces lung cancer mortality, although worldwide **adoption of lung cancer screening programs has been slow,** with limited uptake compared with other cancer screening programs.[5] Patients screened for lung cancer are more likely to be diagnosed in Stage 1 and experience improved chance of survival.[6]

As guidelines for lung cancer screening continue to evolve, the number of bronchoscopies performed is expected to rise.

Countries commited to LDCT Screening:
US, Canada, China, South Korea, Australia, Czechia Poland, Croatia, Italy, UK, Poland and Romania.

Global Challenges

Accurate Staging and Advanced Testing

Accurate staging and advanced testing play a vital role in progressing lung cancer diagnostics. While PET-CT scans have been commonly used for staging, they have significant limitations. Studies indicate that relying solely on PET-CT can result in:

- **19% of patients mediastinal lymph nodes being falsely over-staged**[7-9]
- **13% of patients mediastinal lymph nodes being falsely under-staged**[7-9]

These inaccuracies in PET-CT highlight the need for comprehensive diagnostics and advanced tissue collection during sampling to ensure accurate staging, personalized medicine, and molecular testing.

A Comprehensive Approach

A comprehensive, dynamic solution enabling thorough sampling throughout the lung is essential. Our advanced portfolio has a large variety of bronchoscopes covering diagnostic and staging capabilities for lung cancer and other pulmonary diseases.

EBUS-TBNA: Central Airways

International Guidelines have recommended EBUS-TBNA as the first diagnostic method for staging lung cancer since 2013 with worldwide recognition.[10,11]

- **Real-time linear EBUS**
- **Lymph node sampling for staging**

EBUS-TBNA: Segmental & Sub-segmental Airways

The BF-UCP190F can reach the segmental and sub-segmental airways of the lung and can enable real-time visualization and sampling in this area.[15]

- **Real-time linear EBUS**
- **Lymph node staging in the Peripheral zone**
- **Lesion diagnosis**

Radial EBUS: Peripheral Airways

Radial EBUS is recommended for a peripheral lesion location confirmation for a more accurate biopsy.

- **Access to periphery**
- **Identify nodule location**
- **Sampling of solitary pulmonary nodules (SPN) for diagnosis**

EBUS-TBNA in Central Airways

Endobronchial ultrasound transbronchial needle aspiration (EBUS-TBNA) is a reliable and commonly established technique that enables the visualization and sampling of mediastinal, central and hilar lymph nodes, as well as lesions.

The acquired specimen can also be used to obtain a reliable lung cancer diagnosis as well as for cell-block preparation, immunochemistry and molecular studies.

Linear EBUS – Real-time Visulization
See beyond the walls of the airways to detect, in real-time, the precise location of lymph nodes.

Lymph Node Staging and Diagnosis
EBUS-TBNA needles for every situation.

Real-time Visualization and Sampling in Deeper Regions

The BF-UCP190F enables real-time visualization and sampling in segmental and sub-segmental lung regions, supporting precise specimen collection for diagnostic assessment.[15]

- Real-time ultrasound imaging enables direct visualization of the EBUS needle as it penetrates the lymph node and the lesions. This facilitates correct capsule-to-capsule technique, which helps optimize sample collection.

- Sampling under ultrasound has demonstrated a high safety profile and may enhance the likelihood of obtaining adequate biopsy samples.[4]

Accessing Challenging N1 Lymph Nodes

About 70% of metastatic lymph nodes missed by EBUS-TBNA in N0 patients are beyond reach of standard scopes in N1 regions.[3–4]

The BF-UCP190F overcomes this barrier by extending access into segmental and sub-segmental airways for distal N1 staging.[15]

The All in One Olympus EBUS Solution

Diagnosis and Staging in One Procedure

Perform real-time sampling and staging in one compact system designed for improved efficiency and enhanced patient care.

EBUS-TBNA Solutions

Linear EBUS – Real-time Visulization

BF-UC190F/290F Bronchoscope

- Up to 160° angulation for easy-to-achieve bronchial wall apposition.
- 6.6 mm outer diameter optimal steadiness for central lymph node staging.
- 5° steeper puncture angle for smooth penetration of the bronchial wall.

BF-UCP190F Bronchoscope

- Slim 5.9 mm outer diameter for extended reach into deeper lung regions.
- Up to 170° upper angulation for enhanced maneuverability.
- 14° forward oblique view for more straightforward endoscopic observation

EU-ME3 Ultrasound Processor

- Provides cross-sectional ultrasound images of the airway wall, lymph nodes, or peripheral lung lesions.

Lung Cancer Staging and Diagnosis

ViziShot 2 FLEX Needle

- EBUS needle with a 19G diameter with FNA (fine needle aspiration) and FNB (fine needle biopsy) indication.
- Supports histological sampling for suspected sarcoidosis and lymphoma but also helps to provide more tissue for advanced molecular analyses.

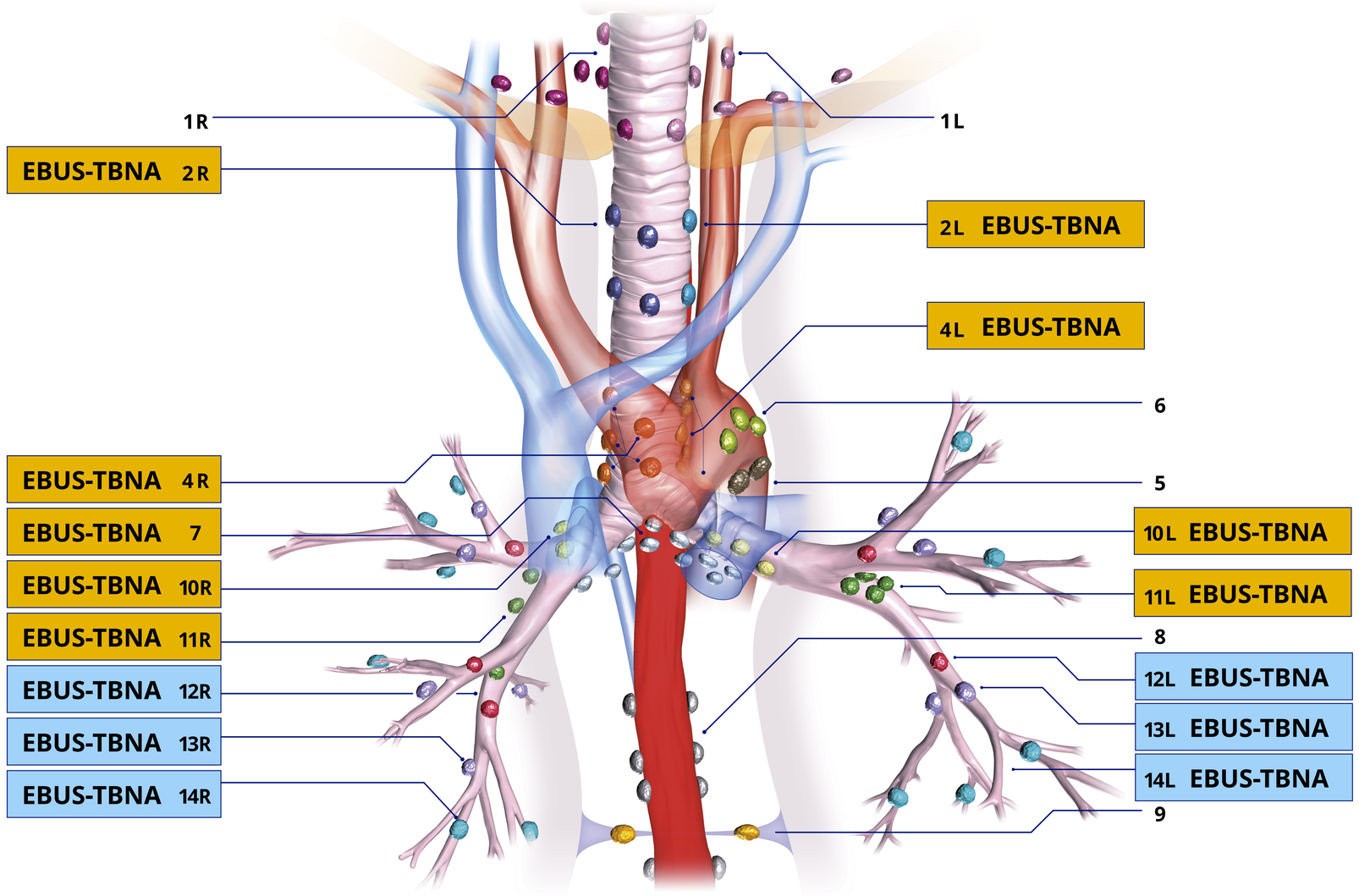
ViziShot 2 Needles

- The improved 21 G, 22 G and 25 G needles.
- Smooth needle penetration thanks to sharper needle tip.
- Adequate tissue collection for diagnosis and advanced molecular testing.

ViziShot Needle

- Reliable and long-established EBUS-TBNA needle.

EBUS-TBNA: Lymph Node Staging



Supraclavicular Nodes

1 Low cervical, supraclavicular and sternal notch nodes

Superior Mediastinal Nodes

2 Upper Paratracheal

3 Pre-vascular and retrotracheal

4 Lower Paratracheal

Aortic Nodes

5 Subaortic (AP window)

6 Para-aortic (ascending aorta or phrenic)

Inferior Mediastinal Nodes

7 Subcarinal

8 Paraesophageal (below carina)

9 Pulmonary Ligament

N1 Nodes

10 Hilar/Interlobar

11 Hilar/Interlobar

Accessed with the BF-UCP190F

12 Lobar (Peripheral)

13 Segmental (Peripheral)

14 Subsegmental (Peripheral)

R- right **L**- left

The BF-UCP190F significantly improved the accessibility and puncture performance, offering substantial enhancement over the existing scope, BF-UC190F, in the segmental and subsegmental bronchial areas.

We believe that BF-UCP190F will further expand the indications for EBUS-TBNA.

Yuta Takashima
Hokkaido University Hospital,
Assistant Professor

Radial EBUS

The diagnosis of peripheral pulmonary lesions has been a challenge over the past decades and the range of diagnostic procedures is wide. Bronchoscopy, with a reported pneumothorax rate of only 1.5%, is the least invasive approach to peripheral lesions.[12]

Access – Localizing the lesion
Getting closer to the periphery with an ultra-thin scope or with a combination of a scope and the Guide Sheath.

Identify – Lesion confirmation
The use of a miniature probe allows for the identification of over 90% of lesions.[13-14]

Sampling – Solitary pulmonary nodules (SPN)
Flexible devices for the difficult-to-reach periphery location.

Radial EBUS Solutions

Access the Periphery

BF-MP190/290F Bronchoscope

- Ultrathin 3.0 mm distal-end outer diameter to reach even the lung periphery.
- 1.7 mm working channel diameter.
- Insertion tube rotation function.

BF-P190/290 Bronchoscope

- Slim 4.2 mm outer diameter for improved access to the deeper lung regions.
- Insertion tube rotation for simplified operation.
- 2.0 mm working channel diameter.
- Insertion tube rotation function.

Sampling of SPNs for Diagnosis

Guide Sheath Kit 2

- Facilitates a smooth, more efficient approach to peripheral pulmonary lesions, enabling ultrasound identification of the lesion and repeated sampling.

PeriView FLEX Needle

- This 21 G needle provides enhanced flexibility and versatility to improve access.

EU-ME3 Ultrasound Processor

- Provides cross-sectional ultrasound images of the airway wall, lymph nodes, or peripheral lung lesions.

Identify Nodule Location

Radial EBUS Probes

- Ultrasonic imaging via a slim endoscope.
- Extra-slim probe design
- 360° ultrasonic view.
- Detailed ultrasonic images in a thin airway lumen.

Single-use Guiding Device

- Designed to steer the Olympus Guide Sheath to reach the targeted lesion.

Your Trusted Partner in Pulmonology

Olympus Products and Solutions

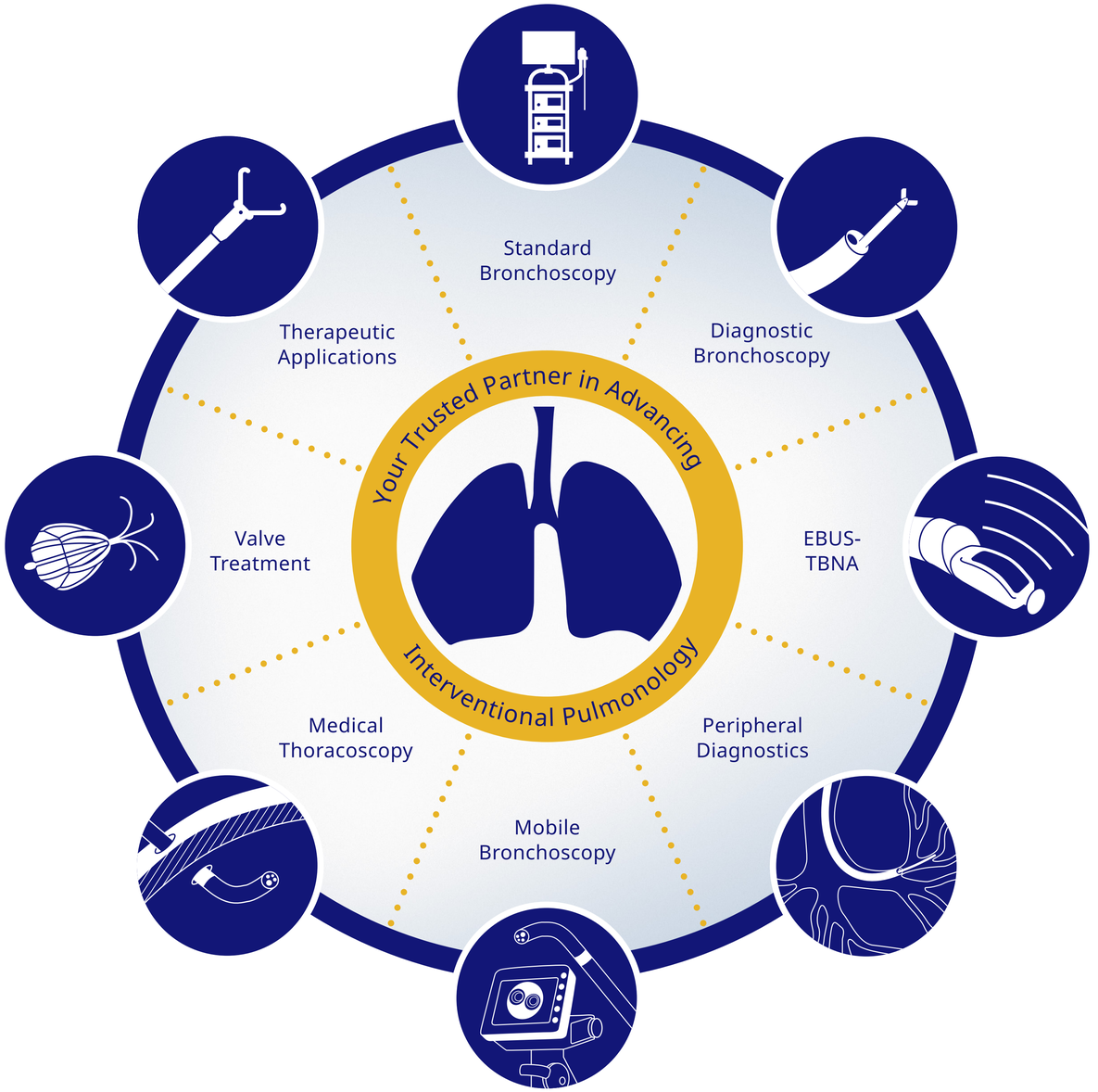
Building on our legacy of procedural excellence, we support your lung cancer diagnosis and staging expertise to enhance outcomes and ensure seamless workflow integration.

Factors Setting Us Apart

- Pioneer and leader in EBUS-TBNA, EUS and endoscopy.
- Legacy of procedural excellence.
- Aiming at better overall patient outcomes and providing seamless workflow integration.

Beyond the Product

- Confidence through dedicated field service and clinical support.
- Flexible financial offerings to help install best-in-class equipment.
- Focused on infection prevention.
- Comprehensive professional education offering.



Olympus Support

Let’s Take on Lung Cancer Together

We care about achieving the best results in lung cancer diagnosis and staging, and we know you do too. Our passion has translated into our portfolio of minimally invasive lung cancer solutions to help tackle this devastating disease today and in the future.

Financial Services

- Leverage our comprehensive portfolio of single-use and reusable flexible bronchoscopes to optimize ownership expenses (including acquisition, repair, cleaning, etc.) and bolster your financial planning capabilities.
- Simplified and streamlined purchasing
- Tracking/management of endoscope usage
- Cost analysis

Olympus Continuum

- Olympus has curated a comprehensive platform of education/training programs.
- Broaden your clinical expertise and enhance your procedural skills at every stage of your career.

Infection Prevention Solutions

Customize scope utilization to meet your procedural situation and the infection control needs of the patient thus minimizing the risk of infection.

Olympus Service Solutions

Olympus provides a level of service support that extends far beyond mere repairs. Unique service solutions can increase equipment uptime and keep processes running reliably.

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